

## Patent claims:

1           1. A main or press cylinder of a tube and extrusion  
2     press which is arranged in a cylinder beam and has as its cylinder  
3     housing a press piston connected with a cantilevered rod which  
4     projects out of the cylinder housing, characterized in that the rod  
5     (9) is formed with an integrated forward advance and retraction  
6     cylinder (12) and in an axial hollow bore (13) receives a telescope  
7     tube (15) forming a pressurizable space (18) which is flow  
8     connected with an annular gap (16), the telescope tube (15) being  
9     concentrically surrounded by a housing shell (17) and being held  
10    stationary at its end projecting from the rod (9) together with the  
11    housing shell (17) in a hydraulic connecting block (14) which has  
12    flow connections (23; 24) opening into the telescope tube (15) and  
13    into the annular gap (16).

1           2. The main or press cylinder according to claim 1  
2     characterized in that the hollow bore (13) is sealed with a piston-  
3     like packing (21) against the housing sleeve (17) along which the  
4     packing slides at the end of the rod upon application of fluid  
5     pressure.

1           3. The main or press cylinder according to claim 1 or 2  
2     characterized in that the end of the telescope tube (15) lying in  
3     the hollow bore (18) is configured with a thickened head (20)  
4     sealing the annular gap (16) and fastening the telescope tube (15)

5 on the housing sleeve (17) which has at this end a radial collar  
6 (19) sealing against the inner wall of the hollow bore (13).

1 4. The main or press cylinder according to claim 3  
2 characterized in that the pressurizable space (18) is connected  
3 with the annular gap (16) by bores (22) in the radial collar (19).

4 5. The main or press cylinder according to one of claims  
5 1 to 4 characterized in that the cylinder chamber (28) of the main  
6 cylinder housing (3) has a guide (10) for the press piston (5) and  
7 the cylinder housing bottom (8) is configured with a guide (11) for  
8 the rod (9).

1 6. A main or press cylinder of a tube and extrusion  
2 press which is arranged in a cylinder beam and in its cylinder  
3 housing has a press piston with a cantilevered rod projecting from  
4 the cylinder housing, especially in accordance with one of claims 1  
5 to 5 characterized in that the free cantilevered end of the rod (9)  
6 is surrounded by a compensating vessel (30) fastened onto the main  
7 cylinder housing (3) in which a slider (31) arranged on the rod end  
8 remote from the main cylinder housing (3), sealed against the  
9 vessel inner wall, slides upon the application of pressure to the  
10 press piston (5), whereby the space (33) formed between the rod (9)  
11 and the compensating vessel (30) and closed at its end by the  
12 slider (31) is provided with a flow connection with cylinder  
13 chamber (28) behind the press piston (5) of the main cylinder

14 housing (3) and into which a pressurized oil conduit (27) also  
15 opens.

1 7. The main or press cylinder according to claim 6  
2 characterized in that the space (33) of the compensating vessel  
3 (30) is additionally connected to a tank conduit (34).

1 8. The main or press cylinder according to claim 6 or 7,  
2 characterized in that in the connecting lines (35) formed in the  
3 cylinder housing bottom (8) and communicating between the space  
4 (33) and the cylinder chamber (28) behind the press piston (5),  
5 switchable blocking valves (36) are provided.